

HighPoint Unveils up to 192TB True Gen5 x16 NVMe Storage & Performance Solution for ASUS PRO WS WRX90E Sage SE via a single PCIe 5.0 Slot!

High-performance workstation platforms built around AMD's powerful Threadripper PRO CPU family, such as ASUS and ASRock WRX90 series motherboards, are designed to tackle professional, data-intensive content creation, media post-production and 3D design & rendering applications.

These workflows need fast and flexible computing platform with a high number of PCIe Gen5 x16 slots, to accommodate multiple high-end GPUs, and high-density storage capable of operating at maximum transfer throughput for hours on end.

HighPoint's PCIe Gen5 x16 NVMe Switch and RAID Adapters are up to the task. Built for professional-grade workstation platforms, and designed to excel in grueling 24/7 workflows, Rocket 1608A Switch AICs and Rocket 7608A RAID AICs leverage HighPoint's unique PCIe Switching Hardware Architecture to deliver 56GB/s of real-world Gen5 x16 transfer performance, and are capable of hosting a massive 192TB of Gen4 or Gen5 M.2 storage via a single PCIe 5.0 x16 slot!

High-Performance Switch Technology Maximizes signal integrity, Minimizes latency, and delivers True x16 Transfer Performance!

A high-performance workstation is a core component of professional media editing and content creation workflow; maximizing productivity ensures critical project deadlines are met. Such workflows are highly data-intensive, and require a fast, robust NVMe-based storage solution, most often in the form of an PCIe AIC (add-in-card).

While the promise of Gen5 transfer speed at entry level pricing make your average Gen5 NVMe AIC look great on paper, a closer look will quickly expose the hard truth; few, if any, are capable of handling the rigors of modern high-performance workstations. Such AICs are completely reliant upon the host platform for resource allocation, and don't always play well with other PCIe devices, such as a high-end GPU or capture card. Depending on your platform and configuration, you may be forced to sacrifice speed, capacity, or both for the sake of mere compatibility!

In contrast, Rocket 1600 and 7600 series Gen5 NVMe AICs utilize state-of-the-art PCIe Switch technology to deliver a guaranteed x16 lanes of Gen5 transfer bandwidth, and maximize transfer-speed for up to 8 Gen4 or Gen5 M.2 SSDs.

HighPoint's High-Performance PCIe Gen5 Switch Architecture forms the core of each Rocket Gen5 NVMe AIC. The innovative hardware design incorporates Broadcom PEX89048 Switch ICs to provide x48 lanes of independent, self-managed Gen5 bandwidth. This enables each AIC to fully utilize any of the WRX90E platform's PCIe Gen5 x16 slots and deliver up to 56GB/s of real-world transfer speed via 8 Gen4 or Gen5 M.2 SSDs.

Advanced PCIe Gen5 Cooling Solutions

Rocket 1608A and 7608A NVMe AICs are equipped with our Advanced PCIe Gen5 cooling solution, which leverages a full-length aluminum heatsink with copper SSD contacts, an integrated low-decibel cooling fan, two layers of thermal padding, and a ventilated PCIe bracket to rapidly draw waste heat away from the sensitive NVMe componentry. The innovative hardware cooling system not only provides a high-level of durability, it ensures hosted M.2 SSDs always operate within their recommended temperature thresholds, thereby maximizing both the performance and lifespan of the storage media.

Integrated, Self-Diagnostic Hardware Monitoring Services are ideal for Mission Critical Workstation Platforms

Rocket 1608A and 7608A AICs were engineered to accommodate enterprise-grade hardware environments. Both AICs strictly adhere to PCIe CEM (Card Electromechanical) specifications, and were engineered to provide maximum clearance for neighboring PCIe devices. Each AIC is equipped with a series of intelligent, self-diagnostic LED indicators designed to instantly convey the status and condition of each SSD, health of critical PCIe switch componentry, and whether the AIC has a full x16 lane host connection. Like all HighPoint Gen5 solutions, Rocket 1608A and 7608A AICs are field replaceable units (FRU), which enables customers and service providers to easily procure replacements with the correct firmware/driver combination.

Intelligent Self-Diagnostic LEDs Indication: HighPoint PCIe Gen5 AICs feature built-In Early Warning LED Indicators that enable administrators to quickly assess the health, performance potential, and operating status of the entire NVMe storage solution. Simple color coding and flash-patterns are used to indicate the condition of hosted SSDs and RAID arrays, the strength of the PCIe connection, fan speed of the cooling hardware, and temperature of the Gen5 PCIe switch IC.

Hardware Secure Boot: Both models employ Hardware Secure Boot to enhance the security of storage infrastructure by preventing unauthorized software, such as a rootkit or ransomware, from being executed during the platform's boot sequence.

Introducing HighPoint's 8-Channel PCIe Gen5 x16 M.2 NVMe AICs

HighPoint Rocket 1608A PCIe Gen5 x16 NVMe Switch AIC:

The Rocket 1608A is essentially the industry's fastest 8x M.2 Plug-and-Play Storage Solution; it will be automatically recognized by any modern OS with native NVMe driver support, such as Windows 11/Server 2022/Hyper-V, VMware ESXi, and all major Linux distributions. Any SSD hosted by the Rocket 1608A will be recognized as ordinary physical disks and are ready for immediate use.

Any Gen4 or Gen5 SSDs hosted by Rocket 1608A AICs will be immediately recognized as an available drive by the OS storage utility or SDS (software defined storage) suites they can be treated like any other physical disk, and can be configured into software RAID arrays or used independently, as desired.

<https://www.highpoint-tech.com/nvme-switch-aic/gen5/rocket-1608a>

HighPoint Rocket 7608A PCIe Gen5 x16 NVMe RAID AIC:

The Rocket 7608A was designed for professional workstation applications that require an all-in-one NVMe solution with enterprise-grade storage management features, including advanced RAID technology, boot capability, and secure OPAL data encryption. Unlike AMD RAID Expert, which lacks support for newer releases of many Linux distributions, the Rocket 7608A's proven RAID 0, 1, and 10 technology is fully compatible with a wide range of Linux and Windows OS platforms, and includes the industry's most comprehensive Storage Monitoring, Management and Analysis Suite, which enables administrators of any experience level to maximize the performance, reliability and security of NVMe media.

<https://www.highpoint-tech.com/nvme-raid-aic/gen5/rocket-7608a>

The Rocket 7608A's Intelligent, Pro-Active PCIe Gen5 Cooling Solution combines the industry's most advanced NVMe hardware cooling systems with a pro-active suite of monitoring and management tools to keep temperatures in check. A full-Length Aluminum heat exchanger with copper piping rapidly whisks waste heat away from the Gen5 switch IC and controller componentry. HighPoint's SHI (Storage Health Inspector) solution enables administrators can configure temperature thresholds for each SSD to match published specifications, or for compliance with unique computing environments and workflows.

SafeStorage - OPAL SED Solution: Developed to accommodate large-scale RAID arrays as well as individual SSDs, SafeStorage is a comprehensive OPAL SSC TCG based NVMe Hardware Encryption Solution designed to safeguard critical assets by preventing access to stored data when physical disks are misplaced or stolen.

Availability and Pricing

HighPoint's PCIe Gen5 M.2 NVMe AICs will begin shipping in early May 2024, and will be available worldwide, direct from our E-Store and our Authorized Global Resale and Distribution partners.

NVMe Switch Series

- Rocket 1608A – PCIe Gen5 x16 to 8-M.2x4 NVMe Switch AIC

PNVMe RAID Series

- Rocket 7608A – PCIe Gen5 x16 to 8-M.2x4 NVMe RAID AIC

In Summary

HighPoint PCIe Gen5 x16 NVMe Switch and RAID Adapters are ideal storage solutions for high-end media workstations powered by AMD Threadripper CPUs, such as those built around ASUS's PRO WS WRX90E-Sage SE Workstation motherboard. These robust, LP-MD2 compliant adapters were engineered to excel in enterprise-grade computing environments and utilize HighPoint High-performance PCIe Gen5 Switching Architecture and industry-proven RAID & Storage technology to deliver guaranteed Gen5 x16 transfer bandwidth and massive 120+TB of capacity via a single PCIe Gen5 x16 slot.

About HighPoint Technologies, Inc.

HighPoint Technologies stands at the forefront of storage innovation as the industry's -premier manufacturer of high-performance, high-density NVMe Switch and RAID AIC & Adapter solutions for off-the-shelf x86 AMD and Intel platforms. With a rich history spanning nearly three decades, our dedication to delivering innovative, reliable, and high-performance storage solutions has consistently set us ahead in the marketplace.

HighPoint's NVMe storage solutions are powered by our industry-proven PCIe Switching Architecture, and designed to address the dynamic requirements of AI applications, Data Centers, Edge Servers, and high-performance workstation and desktop platforms, enabling customers to keep pace with today's rapidly evolving technology landscape.

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